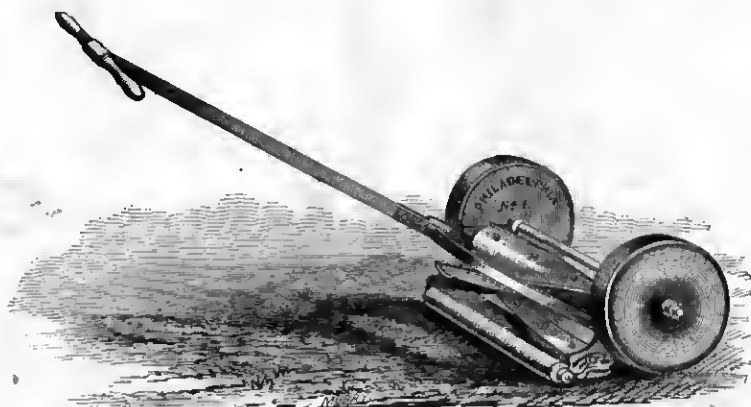


20- 25850

THE PHILADELPHIA LAWN MOWERS, FOR 1872.



THE PHILADELPHIA LAWN MOWER, No. 1.

		<i>Power Required.</i>	<i>Width of Cut.</i>	<i>Weight.</i>	<i>Price on cars at Phila.</i>
No. 00,	A Lady,	.	10 inches,	28 lbs.	\$15.00
" 1, Jr.	A Youth,	.	14 "	37 "	20.00
" 1,	One Man,	.	15 "	63 "	25.00
" 2, Jr.	One Man,	.	16 "	42 "	25.00
" 2,	One or two Men,	.	20 "	75 "	30.00
" 2½,	A light Horse, (Draft Pole.)	.	30 "	275 "	90.00
" 2½,	" " (Driver's Seat and Shafts.)	.	30 "	315 "	110.00
" 3,	A Strong Horse,	.	36 "	500 "	150.00

Warranted to work as represented in the following pages, if properly managed.

ROBERT BUIST, Jr.,

Nos. 922 & 924 Market Street. Philadelphia.

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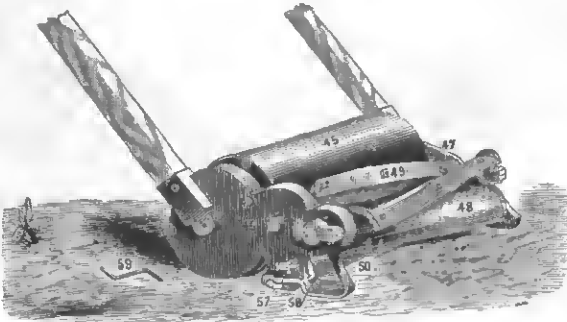
1872 CIRCULAR.

IMPROVEMENT WHEREVER NEEDED has been our motto from the first in manufacturing our Lawn Mowers. With the best facilities for testing them ourselves on all conditions of ground in our spacious Park, and of watching them in the hands of others, at the hundreds of suburban residences immediately around Philadelphia, we have endeavored to profit by every experience; and can say truthfully, that we are sparing neither labor nor expense in our determination to maintain for the Philadelphia Lawn Mower its reputation for superiority, in practical use, over all other Lawn Mowers. We are not contending with low-priced machines, but for the prize of commendation from the public, that "THE PHILADELPHIA" is the very BEST LAWN MOWER for general use in the market. We also contend that it is the cheapest, and claim for it the reputation of bringing down to within a reasonable cost to the user, prices ranging from double to treble those now asked by us for as large and greatly superior Machines. When we commenced the manufacture of Lawn Mowers three years ago, the retail price in Philadelphia of a good 14-inch Machine was \$45.00.

As will appear on the succeeding pages of this circular, we have dispensed with the 13-inch Machine made by us last year, and called the No. 0, and have remodeled both the 10-inch and the 30-inch Machines, substituting *concealed cog gearing* for the *endless chain* formerly used, and otherwise improving them. We also offer two additional sizes, viz.: The 14-inch and 16-inch Machines. These Machines are about one-half the weight that has heretofore been considered necessary, and run proportionably lighter; while a test will convince the most skeptical, that for all practical purposes they are greatly in advance of the old style of heavy Roller Machines.

"How will I sharpen my Lawn Mower?" is a question we are often asked. We usually answer in the Yankee style by asking another—"Have you read the printed directions sent with the Machine?" The answer almost invariably is—"no." And this is the cause of nearly all trouble in using them. We have so perfected our Machines, that any one with skill enough to use a wrench, screw-driver and oil-can, and to turn a crank, and will READ AND FOLLOW THE DIRECTIONS sent with each Machine, will have but little trouble in keeping their Lawn Mower in perfect order. It requires more time and skill to keep a common scythe or grass hook in order than a Philadelphia Lawn Mower, as the time needed for this purpose should not exceed ten minutes for every two acres cut by the Machine.

GRAHAM, EMLEN & PASSMORE, Patentees and Manufacturers.



PHILADELPHIA LAWN MOWER, No. 00, OR 10-INCH.

This little Machine weighs about 28 lbs., cuts a swath 10 inches wide, and runs very easily. It is intended for cutting the grass on narrow borders and other places in the Flower Garden, where it would be difficult to use a larger Mower; and being sold at so low a price, will meet the wants of those whose grass plots are too small to warrant the purchase of a more expensive one. It will do good work on smooth ground, in grass not over three inches high, and will also work on *rougher* ground equally well with other *Roller* Lawn Mowers, but must not be expected to equal our Machines with two driving wheels.

DESCRIPTION.—As will be seen by the cut, the Machine is carried on the Roller 45, which turns freely on the shaft. To either end of this shaft are secured the side-plates; and on the front end of the side-plates is carried the *celebrated cutting apparatus* of the PHILADELPHIA LAWN MOWERS, described on page 5. Motion is communicated to the cutters by cog gearing, which is protected from the cut grass by a shield attached to the side-plate. Two light wooden handles of suitable length are bolted to the side-plates, and joined at their upper ends by a cross-piece not shown in the cut.

When in use, no part of the Machine except the roller touches the ground, the height of cut being regulated entirely by the position of the handles

THE PHILADELPHIA LAWN MOWER, No. 1, JR., OR 14-INCH.

See cut on page 4.

This Machine is intended for small lawns and grass plots; it cuts a swath 14 inches wide, weighs 36 lbs., and is easily worked by a lad. It is of the same general construction as the No. 1, described on page 5, except that the driving wheels are $6\frac{1}{2}$ instead of $10\frac{1}{2}$ inches in diameter; the gearing is effectually concealed, the knives are of the best cast steel, and the Machine is so compact and strong, that it is impossible to derange the parts by any reasonable amount of abuse.

The Philadelphia Lawn Mower, No. 2, Jr. cuts a swath 16 inches wide, weighs about 40 lbs., runs very light for one man, and is the best size for general purposes. In construction it differs from the No. 1, Jr., only in width of cut and weight.

Early last summer we manufactured about fifty of the above Machines, and subjected them throughout the season to the most severe tests on all kinds of ground, and in every variety and condition of grass, with the most satisfactory result.

They will cut as high grass as other revolving knife lawn mowers, but like them are not of practical use in grass over 5 or 6 inches high.



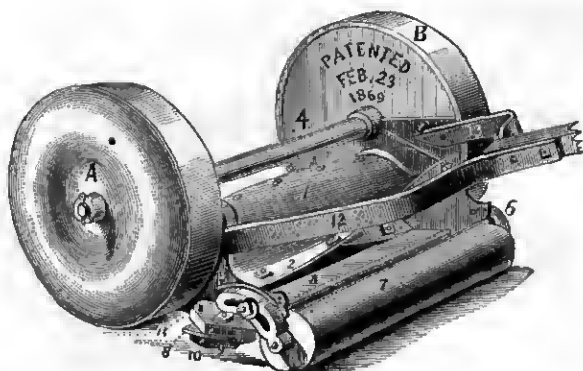
THE PHILADELPHIA LAWN MOWER, No. 1, JR.

While still recommending our No. 1 as the most desirable, where the ground is level, but very rough, we wish particularly to call the attention of those in want of a Lawn Mower to our new 14 and 16-inch Machines, assuring them that, though they are only about half the weight of those offered by other manufacturers, they will do their work as well under all circumstances; and that, owing to the few parts used in their construction, they are actually stronger and much less liable to get out of order. While in nearly all cases where a Lawn Mower is of practical use, the labor of working them is reduced almost as much as the weight.

The Philadelphia Lawn Mower, No. 1, weighs 63 lbs., cuts a swath 15 inches wide, and is the size that has been most generally used; it is light work for one man. It is not intended to cut grass over five inches high, but will cut that which is higher, though not so well, and runs harder. It is intended to work on smooth ground, but will do good work on *any ground that can be well mown with a scythe*. In all public trials with different Lawn Mowers, this Machine has been pronounced by the judges, when an award was made, to have done the **best work**, to be the **lightest draught**, and to be the **most simple** in construction, and **durable**, of any other entered for competition. As will be seen from the cut, it is entirely different in construction from Lawn Mowers of other makes.

The Frame is formed of two circular disks or side-plates, keyed on a shaft which projects through them, forming an axle on either end for the driving wheels, which are 10½ inches in diameter, and furnished with internal gear into which the pinions on the cylinder shaft mesh.

The Cylinder, or revolving cutter, is made of cast iron, and has three spiral blades, against the face of which thin stripes of cast steel are bolted, forming the cutting edge. These knives can be moved down as they wear away, and being supported by the cast flange nearly to the edge, they **cannot spring in cutting or be knocked out of place** by a chance stone, and being thin are very **quickly sharpened**.



THE PHILADELPHIA LAWN MOWER, No. 1, 15-INCH CUT.

The Boxes in which the journals of the cylinder turn are so arranged that all wear can be taken up by set screws to prevent any looseness: this is of great importance. No Lawn Mower will do perfect work or run easily if the cylinder shaft is loose in its boxes. The impossibility of taking up this wear, and the springing, breaking or bending of the revolving knives, has been the cause of so many Lawn Mowers proving worthless after a few months' use.

The Lower Knife is made of best cast steel, backed by cast iron to prevent springing, and can be adjusted to or from the cylinder by set screws.

The Height of Cut is controlled by a small adjustable roller placed directly in the rear of the lower knife, and preventing the possibility of any drag on the ground.

The Gearing is entirely concealed, and protected from the cut grass by the disk side-plates fitting closely in the rim of the driving wheels.

The Handle is loosely attached, so as to leave the cutters at liberty to follow the surface of the ground, and is so arranged that the operator can raise the knives to pass over walks, etc.

This plan of construction has the following advantages:—

1st. The Machine will cut as well when turning a short corner as when pushed straight forward—which other Lawn Mowers will not do.

2d. The tendency of the gearing is to lift the lower knife, instead of pressing it down, thus causing it to pass lightly over uneven ground.

3d. Being single geared, the friction and number of parts is reduced one-half.

4th. The cut grass is thrown behind the cutters, instead of forward to be cut over and over again, thus greatly decreasing the labor of working the machine.

5th. It is as portable as a hand truck.

6th. So few parts being used, they are each made very strong, and are thus not liable to break or get out of order, and render the Machine very durable.

The Philadelphia Lawn Mower, No. 2, is similar in construction to the No. 1. It weighs about 75 lbs., and cuts a swath 20 inches wide. In grass not over three inches high, and on level ground, it is easily worked by one man—in this case the exertion is about the same as is required to work those of some other makes, cutting only fourteen inches wide. On rougher ground, and in grass not over six inches high, it is frequently worked by two men, and gets over the ground rapidly.

Where the lawn is level, and the grass cut every five to seven days, our 20-inch

is the most desirable Machine on the list, as under these circumstances a man will do nearly twice the work with it that he would be able to accomplish with one cutting 14 inches wide.

THE PHILADELPHIA LAWN MOWER, No 2½, (Pony Size).

This Machine was first introduced by us last year, and the large demand for them, together with our own observations of their practical working, satisfied us that they are just what is needed for use on lawns considerably obstructed by walks and shrubbery, and too large for the ordinary hand Mowers.

Heretofore, Horse Lawn Mowers, like those for hand use, have been needlessly heavy. The difficulty of guiding them along the borders of walks, and around shrubbery, trees, &c., has never been overcome in other machines, and the horse walking directly in front of the mower rendered it necessary to cut very close to the ground, in order to get the grass which would be pressed down by the horse's feet, oftentimes injuring by such close cutting in hot, dry weather, the beauty of the sod.

All these objections are overcome by the use of our Pony Machine, which, while being abundantly strong, is so light and evenly balanced, that by means of the swivel draft pole the driver can cut around and close to trees, shrubbery, flower beds, &c., without the horse changing the direction in which he is moving; much the same and with no more labor than the ploughman guides his plough with one hand and drives with the other; and as the grass is not pressed down in front of the cutters, either by the horse's feet or by a carrying roller, a perfectly even green-sward can be left, and, if necessary, of sufficient height to protect the grass roots in dry weather. The cutting knives also can be easily set so as to pass over rough ground without injury, and yet leave an even cut. In place of the endless chain used last year to give motion to the knives, we have substituted concealed cog gearing as more durable, and have improved the Machine at all other points where experience showed that improvement could be made with advantage. As now made, we have tested it thoroughly by several months' steady use in Fairmount Park, on all kinds of surface, and feel warranted in pronouncing it all that could be desired as a Lawn Mower.

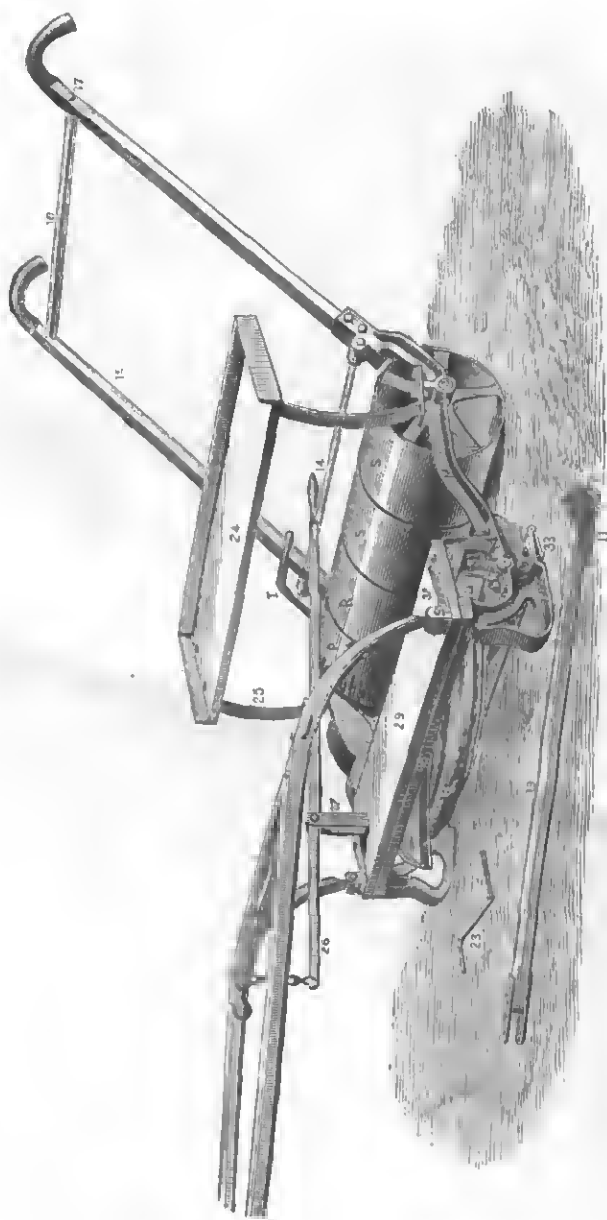
This Machine cuts a swath 30 inches wide, makes but little noise when in operation, and is very light draft. The height of cut is regulated by a small adjustable roller directly in rear of the cutters. A tolerably correct idea of its construction may be had from the engravings; that on page 7 represents the Machine as generally used, with swivel draft-pole. Rigged in this way it will do good work on any kind of surface in grass not over six inches high, and is the best form for use on medium sized lawns, with rough surface and obstructions intervening. The engraving on page 8 represents the Machine with shafts and driver's seat. It is used in this form on smooth, open, large lawns, and can be worked by any one capable of driving and using the oil can. By levers within easy reach of the driver, it can be instantly thrown out of gear, and the cutters raised to pass obstructions. The shafts can be attached as shown in the cut, so that the horse walks in front, or to one side, so as not to tread on the standing grass.

The Philadelphia Lawn Mower, No. 3, weighs about 500 lbs., cuts a swath 36 inches wide, and is drawn by one horse. The cut on page 10 represents the Machine in operation. The cutting apparatus is similar to that used on the No. 1 Machine, except that two blades are used in place of three, and driven at a proportionately greater speed. The HEIGHT OF CUT is regulated by the castor wheels and a small roller placed in the rear of the cutters. The DRIVER'S SEAT can be moved backwards or



THE PHILADELPHIA LAWN MOWER, No. 2½, PONEY SIZE, WITH SWIVEL DRAFT POLE.

Width of Cut 30 inches, weight 275 lbs. Price on cars at Philadelphia \$90 00.



THE PHILADELPHIA LAWN MOWER, No. 24.

Complete with Spiral Draft Pole, Shafts and Driver's Seat.

Width of Cut 30 inches, weight 315 lbs. Price on Cars at Philadelphia, \$110.00

forwards to balance the weight of the cutters. By means of levers within easy reach, the driver can instantly throw the Machine out of gear and raise the cutters, when the Machine can be used as a ROLLER FOR THE WALKS, &c.

The No. 3 is intended for use on large lawns and parks where the ground is moderately smooth and not too hilly. If properly handled it will make perfect work on grass four inches high, and will cut that which is eight or nine inches high; but in this case the horse's tracks will, in some conditions of the grass, show, so that a second cutting may be requisite. As the horse guides the Machine by the shafts, the driver is relieved of all labor except the driving.

Thousands are now using the PHILADELPHIA LAWN MOWERS, and the letters of commendation we have received would make a volume. But believing our Machines are now sufficiently well known to render publication of them unnecessary, we print only the following extracts from the *Country Gentleman*, of July 12th, 1871—a periodical which stands confessedly at the head of the agricultural press of this country, and publishes no praise of implements that it does not know is correct. The writer has one of our No. 1, 15-inch Machines:

THE PHILADELPHIA LAWN MOWER.

A smooth, handsomely kept lawn, is one of the indispensable requirements of neat grounds, and no country residence can be complete without it. To keep the grass cut short by going over it with a lawn scythe once a week, is a laborious task—one to which all laborers, except those specially educated to it, have a particular dislike. Doing the work by machinery becomes consequently very desirable; and a number of hand as well as horse mowers have been invented and manufactured for the purpose.

For a lawn of an acre, a hand-mower should be sufficient. We have at different times examined a number out of the many that have been placed in market. Until recently we have not succeeded in finding one to answer the desired purpose. They have generally run too hard; and although recommended as "capable of being worked by a boy," the boy did not usually care to drive them for more than a few minutes, and men would soon throw them all aside and take the hand-scythe. When at Rochester some weeks since, we inquired of several gentlemen for the results of their experiments. We found that the Philadelphia Mower had given satisfaction to those who had tried it, while most others had proved partial failures. Our friend, H. E. Hooker, had used the Philadelphia with great success. By its assistance, one man would go over his two acre lawn with ease in a day; only half an acre could be handsomely shaved with a lawn scythe. It would not only work four times as fast, but do the work better and with greater ease to the operator. We have since obtained one of these Mowers, as now manufactured, from R. H. Allen & Co., of New York. After a full trial, we find it not only to answer fully our expectations, but to exceed them. It has three qualities that will commend it to general use. It runs with great ease—it makes perfect work—and it will cut grass six inches high or even more. The last would be a defect, by tempting to carelessness, if it were not for the ease of its working—for the grass of no lawn should be allowed to grow six inches high—but every one would be tempted to do so with a hard running machine. We have used this Mower in cutting the grass on a portion of our grounds not usually kept as a lawn, where the surface is rough; but by setting the knives high, found no difficulty in cutting the surface neatly and handsomely. There is one requisite for its successful operation, which every person who uses any kind of rapidly revolving machine should always bear in mind—namely, to keep such rapidly moving parts well oiled at the pivots or journals. The Lawn Mower should have oil applied every fifteen or twenty minutes, and before there is a perceptible increase in its friction. If the rubbing parts are allowed to become dry, they will be worn and injured, and the operator finding it hard to run, will be apt to pronounce it a failure.

There may be, and probably are, other hand Mowers equal to the Philadelphia, but it has not been our good fortune to find them; and we know that some which have been publicly tried with it, and which have presented nearly equal points on such trials, have proved quite unsatisfactory when used for a time.

"THE PHILADELPHIA LAWN MOWER seems really to combine all the good qualities of the various apparatuses for Lawn mowing now before the Public."

Extract from "THE COUNTRYMAN," published in Cincinnati, Ohio.



THE PHILADELPHIA LAWN MOWER, No. 3.

Width of Cut 36 inches, . . . Price, delivered on cars at Philadelphia, \$150.00.

† ROBERT BUIST, Jr.,

922 & 924 Market Street, Philadelphia.